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A Cultural Resources Overview of the Western Half of the Goosenest Ranger District Klamath National Forest

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by

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A Cultural Resources Overview
Of the Western Half of the Goosenest Ranger District
Klamath National Forest

I. Introduction

A number of laws make the federal government responsible for cultural resources on lands managed or affected by the federal government. These include the Antiquities Act of 1906, the National Historic Preservation Act of 1966, and the National Environmental Policy Act of 1969. Executive Order 11593 orders federal agencies to begin an inventory of cultural resources under their jurisdiction in order to manage these cultural resources as required by the above laws.

The field of cultural resources management, which has grown up as the result of these laws, has defined a three-level approach to fulfilling the mandate of Executive Order 11593. The first step is a cultural resources overview, which summarizes all known published and unpublished information about cultural resources of the area in question. The cultural resources overview identifies patterns of cultural resources distribution and pinpoints lacunae, major and minor, in information on cultural resources in the project area. After the cultural resources overview, the second step involves research to fill lacunae in knowledge identified in the cultural resources overview. Ideally, the third and final step is a survey which identifies 100% of cultural resources in the project area.

This report is the first step in the three-part process. A cultural resources overview draws a culture history of one area under the jurisdiction of a federal agency. An overview differs from an academic culture history in that it is intended to be a management document. It is cast in a form that will be useful to the federal agency in making policies to protect cultural resources.

The cultural resources overview serves this purpose in three ways. First, it identifies the kinds of cultural resources that occur or are likely to occur in

the area in control and discusses which of these resources are likely to be significant. Second, it identifies patterns in the distribution of cultural resources of different periods and cultures. These patterns can be used to identify sensitivity areas in which particular kinds of cultural resources are likely to occur, so that particular efforts can be directed in these areas to make sure such cultural resources are not impacted by proposed projects. Thirdly, the cultural resource overview evaluates the adequacy of current knowledge of cultural resources in the project area. Specifically the cultural resources overview seeks to identify major lacunae in our knowledge and make recommendations as to how to remedy these lacunae.

This overview is directed at the western half of the Goosenest Ranger District in the Klamath National Forest, in Northern California. The overview will begin with an introduction to the region covered by the overview and a discussion of its physical and biological characteristics.

Next, the overview will sketch the culture history of the larger region in which the west half of the Goosenest Ranger District is found. This will identify the major cultural processes that affect the Goosenest district. A cultural resource is judged in the context of the historical and cultural context from which it comes, rather than entirely on intrinsic qualities of its own. By writing a culture history we can establish the context against which we must evaluate cultural resources known in the district. The culture history also gives us the context that allows us to identify the importance of gaps in the record that we identify in the overview.

The overview will then summarize known cultural resources in the west half of the Goosenest Ranger District. This summary will follow the outline of the culture history above. It will include some cultural resources that may not be on land owned by the Klamath National Forest because they may help us to identify patterns in the distribution of similar cultural resources on lands owned by the

forest.

The overview will discuss the adequacy of coverage of knowledge of cultural resources in the Goosenest District. This will include some evaluation about whether the absence of sites from cultural patterns identified in the culture history is due to lack of adequate coverage or whether such resources simply don't occur in the region. The overview will analyze the information presented, identifying any patterns and sensitivity areas that can be delineated from existing information, and outline significant gaps in current knowledge.

The final part of the overview will be recommendations for management based on the information summarized in the overview. These will be recommendations for management based on patterns identified in the overview, and recommendations as to how to remedy defects in our current knowledge, to gather information about significant gaps in our knowledge.

II. Sources of Information Available for this Overview.

This overview is based on published and unpublished information about the region of Northern California, as well as specific works relating to the western half of the Goosenest District. The published works consulted are listed in the bibliography, and will be discussed briefly below. The unpublished works consist primarily of sites and reconnaissances recorded by the Forest Service and sites recorded by the state site survey.

One of the first conclusions one reaches on beginning research on the western half of the Goosenest District is that the region of Northern California where it is found has been neglected in the published literature. Nevertheless, after completing the work one is astounded by the amount of material that can be assembled. Some of the more important published works will be mentioned below.

For the entire Indian portion of the culture history, an invaluable starting point was the Handbook of North American Indians, Volume 8, "California"

(Heizer 1978). This includes articles on the prehistoric archeology, historic archeology, and a good ethnographic sketch of the Shasta, based on both published and some unpublished materials (Silver 1978). The two earlier ethnographies (Dixon 1907, Holt 1946) of the Shasta which were used by Silver augment this description. There are a number of other older fragmentary descriptions of the Shasta (cf. Powers 1976, Kroeber 1953).

Unfortunately, the Klamath and the Modoc are not included in the California volume. However, Spier's excellent ethnography (Spier 1930) includes information from earlier authors (Gatschet 1890, Barrett 1910). Vern Ray (1963) has done the same for the Modoc. Stern (1965) deals with the history of the Modoc and the Klamath after the formation of a reservation, although this put them in Oregon, outside the project area.

The history of early travellers through the area is well told by Dillon (1975). In addition, Peter Skene Ogden's journal of his expedition through the district has been published (Davies, Johnson, and Johanson 1961).

The early history of Siskiyou county is told in Wells (1881). For some reason, in the 1880's it was popular for a series of local histories to be written, including Wells' work. The complementary work for neighboring Jackson County, across the Oregon border, is Walling (1884), which often contains material that relates to events in the Goosenest District.

Finally, a crucial source for all later periods of history, and at times for early periods as well, is the Siskiyou Pioneer, the journal of the Siskiyou County Historical Society. This is based on the collection of photos from relatives of the historic events of Siskiyou County. The Klamath County equivalent, Klamath Echoes, also carries stories at times that refer to Siskiyou County. The two journals have each reprinted articles originally printed in the other.

The bulk of unpublished material came from the records of sites from the Klamath National Forest. These include site records and reports of archeological reconnaissances made when some impact is anticipated, such as a timber sale. Some, but not all, of the sites listed by the forest are listed in the State Site Survey, as recorded in the District 2 Clearinghouse for the Society for California Archaeology. Two letters were sent to the State Historic Preservation Office, but neither was answered.

Finally, some information was acquired directly. The author drew on his own work in the district (Hopkins 1978). In addition, the cultural resources personnel of the Klamath National Forest, in particular Jim Rock, Jim MacDonald, and Gail Egolf, were extremely helpful both in answering specific questons and in giving guidance in references to published materials on the district.

III. The Project Area

The project area consists of the western half of the Goosenest Ranger District. The northern boundary is the California state line. The eastern boundary is the line dividing Range 5 W from R 4W, Mount Diablo Meridian. The third boundary of the project area runs diagonally along the southeastern side. This border follows the line dividing township 43 N. from T. 42N, M.D.M. east from the western border to where this line intersects Highway 97. The border then follows Highway 97 north to the Oregon border (see maps 1 and 2).

The heart of the project area is the spine of the Cascade Mountains running north-south and anchored just south of the project area to Mount Shasta. The Klamath River cuts through this mountainous spine on the north end of the project area, in a deep canyon it carved as the land mass was uplifted in the Pliocene (Williams 1949). The Klamath had already established its course when the uplift occurred, and is an antecedent stream. The mountains divide two valleys, the

Shasta Valley and the Butte Valley. Williams describes the Shasta Valley as follows:

> Shasta Valley is an approximately oval basin, about 30 miles long in a north-south direction and 15 miles in greatest width, bordered on one side by the Siskiyou Mountains, and on the other by the Cascade Range. Most of it lies between elevations of 2,500 and 2,800 feet. The eastern flatter half is occupied by a vast flow of basaltic lava recently erupted from the flank of Mount Shasta; the western half consists of older volcanic rocks eroded into a myriad of hillocks that range from a few feet to 200 and rarely 300 feet in height. Most of these hillocks are domical, some are conical, others are mesas, and a few are long, hogback ridges. Together they form a strange landscape, deceptively like the products of recent volcanic activity. Between the hillocks lie many small ponds and marshes and the alluvial flats of slow, winding streams (Williams 1949:11).

On the west the Butte Valley is a fault block valley at the edge of the Basin Range Province. The floor of the valley was occupied by a lake which was gradually filling up with alluvium. This lake originally drained through Sam's Neck to the Klamath River, but as it gradually filled and dried up it shrank until it was below the level of the outlet. Meiss Lake is the last remnant of the old lake. The floor of the Butte Valley lies at about 4,200 feet.

The spine of the High Cascades separates these two valleys. The Cascades are formed by wide basaltic lava volcanoes and flows, spotted with steep cinder cones and andesitic cones. The Cascade Crest is everywhere higher than 5,000 feet, with three major peaks from north to south of Eagle Rock (6993'), Willow Mountain (7830'), and the Goosenest, for which the district is named, which attains 8280'.

The Shasta Valley is relatively dry, with a rainfall of about 15 inches a year. The natural vegetation is fairly open, grassy country, with occasional oaks. Swampy and marshy areas can be found in many parts of the valley.

The Butte Valley on the other side of the Cascades is even dryer. It has bullrush and cattail swamps in its undrained bottom. Away from the lake and marsh are sagebrush and occasional junipers (Grayson 1973). The High Cascade has a higher rainfall. In the winter the mountains are covered with many feet

deep in snow. They are covered with a forest of yellow pine, Douglas fir, and incense cedar. In some southern slopes groves of oaks occur.

Deer and elk can be found in the mountains and even in the Shasta Valley. East of the Cascades gazelle still graze in the Butte Valley. Black bear still can be encountered in the mountains, while grizzly once inhabited them (Dillon 1975).

IV. Culture History of the Western Half of the Goosenest Ranger District

A. Indians

We now have evidence that man first came to the New World more than 30,000 years ago (MacNeish 1971). As a result, a number of sites that previously had been discounted because of questionable dates are being reevaluated. A few of these sites are in California (see Cressman 1977 and Aikens 1978 for a discussion of these sites). We know so little about this period that it is impossible to predict if such sites are likely to occur in the project area. Any site belonging to this period of California prehistory would, of course, be extremely important.

Much better known is the Paleo-Indian period. This period was originally defined on the basis of sites in the Great Plains and the Southwest (Haynes 1966, Roberts 1951). The diagnostic artifact of this period was a projectile point with carefully chipped grooves or flutes on each side of the base of the point. In the earlier Clovis Point, these extended partly up the point from the base, while in the later, exquisitely chipped Folsom Point, the flutes extend almost to the top of the point. Both kinds of points have been found associated with extinct animals dating from the end of the last glacial period.

Some fluted points similar if not identical to the Clovis Points have been found in Oregon and California. These are widely scattered. So far all have come from surface finds or from sites where exact dating and association has not been possible. The nearest such published site is the Borax Lake site in

northern California, near Clear Lake (Harrington 1948). Here several Clovis points were found on the surface and a few more in excavation. Apparently the site represents layers from a number of different time periods that have been telescoped by the action of water, making dating difficult. A recent restudy of the material from Borax Lake using obsidian hydration techniques has shown that a date of considerable antiquity (up to 12,000 years ago) is reasonable, and that at least several other periods of lesser antiquity are also represented in the deposits at the site (Meighan and Haynes 1970). However, it remains true that the antiquity and associations of fluted points in the Far West are still to be established (see discussion in Aikens 1977 and Wallace 1978).

There is evidence of a contemporary or slightly later paleo-Indian tradition in the Far West with ties to the Great Plains, but with a distinct appearance. Several terms have been coined for this culture. It is characterized by a kind of leaf shaped point called the "Cascade Point." Remains of the culture suggest that a number of different kinds of resources were being exploited. Butler (1961) has suggested that this be called "The Old Cordilleran Culture" and can be extended even to include early hunter manifestations in Mexico. Materials from this culture have been found at the Dalles (Cressman 1960), Fort Rock Cave (Cressman, Williams and Krieger 1940), and in Southeastern Washington where earlier Windust phase and a later "Cascade" phase have been defined (Leonhardy and Rice 1970). Work going on currently in the nearby Applegate Valley, Jackson County, Oregon, has identified material like the Snake River materials as analagous to the Windust and Cascade periods (John Draper, personal communication).

It is probable that Paleo Indian manifestations in the mountains of the Far West, including the stretch of the Cascades being considered by this report, will be quite different from the Clovis and Folsom cultures of the High Plains, which were specialized adaptations to the large herds of animals that could be found in the High Plains. Such herds did not and could not have existed in the

area west of the Rockies, and it should come as no surprise that Paleo Indian sites west of the Rockies don't look like those in the Great Plains. At the same time, the presence of occasional scattered finds of fluted points shows that at this time communication existed between the two parts of the North American continent.

Our understanding of the Western Paleo-Indian period is still fairly limited. However, we do know that these region-wide manifestations underlay later developments in Northern California. Sites of roughly 7,000 years or older have been found nearby, to the north and south. After this time — there is evidence that at least two different adaptations developed that would have been practiced by the inhabitants of the project area. To the east a way of life developed based on an increasingly fine adaptation to lacustrine resources of the pluvial lakes in the Great Basin. To the west, where these lakes did not exist, we must conjecture that another adaptation existed, although a gap exists between the Paleo-Indian periods and the materials from a few thousand years ago that can be tied to the ancestors of the historic ethnographic groups occupying the region.

Eastern Lake Cultures

Cressman (1956) has established a gradual development in the Klamath Basin from a generalized hunting pattern to a more and more specific adaptation to riverine, marsh, and lacustrine resources. The archeological record shows a gradual change from "a very widespread subsistence pattern, using about everything the habitat provided as food animals to one in which the range is restricted and the dominant article is fish" (Cressman 1956:468).

A similar pattern has been identified from Lower Klamath Lake (Grayson 1973). This pattern culminated in the Klamath and Modoc Indians of historic times. These people made a living from fish, wild fowl, mussels, and various seeds and

roots such as wocus and ipos, from the lakes and marshes. Their dependence on water resources is attested in ethnographic descriptions (Gatschet 1890, Spier 1930, Stern, 1965, Ray 1963, Barrett 1910). This pattern can be expected to have characterized the eastern edge of the project area, especially around Butte Valley.

Western Side

The pattern of the high Cascades, as well as the valleys like the Shasta and Klamath Valleys is not nearly as well understood. Excavations (Leonhardy 1967, Wallace and Taylor 1952) in the Klamath Canyon have established the presence of people similar to the ethnographic Shasta by 500 years ago. What happened before then we simply don't know. This is more a product of lack of research than any real problem of finding sites.

King et al (1974) have identified a pattern of sites at around 6,000 feet above sea level associated with Borax Lake-like materials, as well as grinding stones presumably used for processing plant materials. Because of the altitude these sites are presumed to be seasonal occupations. If the artifacts really do date to 3 to 6,000 years ago, as the similar pieces from Borax Lake are conjectured to be, then these sites might be part of the answer to the gap in our knowledge. However, because no such site has been excavated, and because we don't know where the corresponding low altitude, cold season sites were, or what they looked like, we are still far from understanding this period. High altitude sites do occur in the project area, although it is not known if they belong to the same time period. Such sites, while often small and unimpressive in appearance, are therefore quite significant.

Apparently the major ethnographic traditions developed their distinctions considerably before contact with the first Europeans. Prehistoric sites can shed light on problems of interpretation of the ethnographic groups discussed below. For instance, the one published excavation in the project area

(Leonhardy 1967) uncovered remains of a semi-subterranean house of a different shape from that reported in some ethnographic reports. Problems such as regional trade, ethnographic boundaries and culture contact can potentially be resolved from archeological excavations.

Contact Period Ethnographic Groups

The boundary between two ethnographic groups ran through the western half of the Goosenest District. To the east were the Modoc and their close relatives, the Klamath, while to the west were the Shasta. The boundary between the two ran along the crest of the Cascades from Mount Shasta north to Mount McLoughlin (Mt. Pitt). A number of authors draw the line in slightly different places (Map 1). The crucial point of difference seems to be where the border should be drawn in the canyon of the Klamath in the northern portion of the Goosenest District.

Silver (1978) limits Shasta territory at the headwaters of Jenny Creek, but she lists a site at Beswick, just below Shasta Creek, 10 to 12 miles upstream from the mouth of Jenny Creek. Heizer and Hester (1970), whom she cites, list three Shasta villages around the mouth of Shovel Creek. Dixon (1907) also shows the eastern Shasta boundary crossing at the mouth of Jenny Creek, while Holt (1946) using the same informant, lists one Shasta named site above the mouth of Shovel Creek.

On the Modoc/Klamath side of the border, Barrett (1910) puts the western border at the confluence of Keen Creek with the Klamath River. Keen (properly Keene) Creek is a tributary of Jenny Creek, so he probably means the confluence of Jenny Creek and the Klamath. Spier (1930) and Ray (1963) draw the border between the Modoc and the Klamath just south of the Klamath River Canyon. This means that in the Klamath River Canyon the Shasta bordered on Klamath, not Modoc. Spier draws the boundary on the southern side of the canyon just above the mouth

of Shovel Creek, while on the northern side the border was just above the mouth of Jenny Creek.

Finally, Kroeber (1953) puts the eastern boundary of the Shasta at "a spot a few miles above the mouth of Fall Creek" (Kroeber 1953:285), while he places the eastern border of the Modoc at the limits of Butte Valley and the Lower Klamath Lake Basin, "with the Shasta below on the river proper" (Kroeber 1953: 318).

There is also variation in the line through the mountainous land south of the Klamath River. Most agree roughly that the line followed the Cascade divide, and was anchored at its southern end on Mt. Shasta. As Kroeber pointed out, "Perhaps this great isolated peak only served them as all tribes about, as a gigantic landmark. The matter is one that looms large on the map, but has little actual significance, the mountain itself, and most of its near environs having been uninhabited" (Kroeber 1953:318).

There are three factors that must be understood to understand the limits of historic Indian territories. First, is the difference in intensity of usage of different parts of the territories. The second is major differences in the adapations of the Shasta and the Modoc/Klamath, with the result that different resources were valued by each group. The third is the fact that Indian concepts of borders and territory were somewhat different from those of Western Society.

First, boundaries of territories among the Shasta and the Klamath/Modoc were not the same as those in European political states. This is not to say that Indians did not have a concept of ownership. Heizer documents that California Indians did maintain "the idea that a certain definable extent of territory was owned and that plants, animals, minerals and the like attached to that land were also owned by the claimants" (Heizer 1966:26). Even though relations between the Shasta and the Modoc were habitually hostile, Shasta could

go Modoc territory to gather. Holt describes Shasta going to attack the Modoc,

> when the Modoc came toward Shasta territory to gather ipos or to hunt ducks /(in the fall?)./ The Shasta camped a night or two on the mountain which they had to cross, and held the war dance. Often they sent one or two women ahead to visit some relative, perhaps a Shasta woman captured by the Modoc, and these came back and reported. The Shasta often gathered ipos in the vicinity, so these women would say, 'We were over here gathering ipos, so we thought we would come over and visit' (Holt 1946:313).

This describes Shasta crossing over the Cascades to Modoc in the Butte Valley. Clearly this strategem depended on Shasta women being allowed to dig ipos in the Butte Valley.

Secondly, parts of the boundary pass through areas of relatively little importance to either groups. For instance, the areas where the line passed along the crest of the Cascades through areas little used by either group were unlikely to be defended by either group. On the other hand, along the Klamath River Canyon, where important salmon fishing stations existed, territory was probably much more jealously guarded.

Thirdly, there was a significant difference in the adaptation of the two groups. The Klamath, and to a lesser extent, the Modoc, were extremely adapted to the lacustrine resources of the marshes and lakes of the Klamath Basin. This adapatation developed over at least 7,000 years (Cressman 1956, Grayson 1973). Their major foodstuffs were derived from the marshes and lakes. These included wocus, camas, ipos, and other roots and seeds, as well as the fish, and migratory fowl that could be found in the still waters of the lakes, rivers, and marshes of the Klamath Basin. The Klamath were so adapted to this that excursions away from the lakes was a fearsome event only conducted to gather spiritual power. The Modoc were not quite as tied to lakes and marshes, but did rely primarily on lake and marsh resources. Only one site has been excavated in historic Modoc territory, the Nightfire Island site. This site lies on the

on the north side of the Klamath River were above the mouth of Jenny Creek. Neither Ray (1963), Barrett (1910), Gatschet (1890) or Stern (1965) list any Klamath or Modoc sites in the Klamath River Canyon. Spier (1930) specifically states that the Klamath River below the mouth of the Link River (the site of present day Klamath Falls) was not occupied by either the Klamath or the Modoc, although they did go to parts of this area to hunt or fish in different seasons. On the other hand a number of different Shasta informants list and remember named sites along the Klamath River Canyon up to and slightly above Shovel Creek. The Shasta were adapted to the fast flowing water of the river. Interestingly, the Klamath River Canyon is near the limit of salmon. According to Jack Hanel, Biologist for Pacitic Power and Light, in dry years salmon did not ascend the Klamath above the rapids that are now under Copco Dam, although in wet years salmon made it all the way up the Klamath Basin. This conforms with the statement by Peter Skene Ogden (Davies, Johnson and Johanson 1961) that the salmon did not pass the rapids in the canyon, while Fremont (Jackson and Spence 1970) reports seeing salmon in the Klamath Basin. The limit of the Shasta settlement was the limit of the salmon and trout in the Klamath River. The plateau above the Klamath Canyon was probably at least nominally Klamath or Takelma.

There is another disputed ethnic boundary just to the north of this project area. Dixon (1907) and Holt (1946), both using the same informant, attribute the entire Jenny Creek and Butte Creek drainage, and nearly all of the Bear Creek (Stewart River) drainage to the Shasta. Sargent Sambo, their major informant, was a member of the band of Shasta who claimed this territory. On the other hand, Spier (1927, 1930) argues strongly that most or all of this territory belonged to Upland Takelma. He cites information from his Klamath informants, which includes

words collected from inhabitants of the area which Sapir identified as Takelma rather than Shasta in form.

Historically Tipsu Tyee occupied the mountains above Ashland, and was identified as Shasta (Wells 1881, Walling 1884). Sapir (1907) ascribes the Upper Bear Creek Valley to the Upland Takelma, but mentions that Dixon informed him

> that the Shasta claimed the country east of Table Rock and about Jacksonville, and that he was given Shasta place names belonging to the region. It is possible then that the Upland Takelma did not really border directly on the Klamath, the Shasta intervening, or the country may have been to the same extent a debatable territory between the Upper Takelma and the Shasta (Sapir 1907:253 footnote).

Sapir gives us a hint as to the resolution to this problem when he tells us that the term used by the Downriver Takelma, or the Takelma proper, for the Upland Takelma was "Wulx, i.e., 'enemies,' a name specifically applied to the Shasta, with whom the Takelma were often in hostile relations" (Sapir 1907:252). The Upland Takelma and the Shasta intermarried with one another. Because of these close contacts, a number of the Shasta joined the Rogues (Takelmas, both upland and lowland) in the Rogue Indian Wars of the 1850's. Some Shasta were gathered up after the Rogue Indian Wars and taken to reservations in Oregon. Finally, while both groups were decimated by the impact of the invasion by thousands of Europeans into the area seeking gold, the Rogue Valley Indians were physically removed from the region, while some Shasta at least managed to remain in their homeland. Consequently, when investigators in the beginning of the twentieth century began questioning, there was no one to contest the Shasta claim to the Bear Creek drainage.

It is possible that neither group controlled this drainage. In both groups the village was the largest real political unit. While we might insist on labeling villages according to some larger, linguistic identification, there is a real question as to whether any sense of belonging to a larger political unit

existed. The Shasta and the Upland Takelma intermarried, and many individuals, if not most, were probably bilingual. A Takelma on the Oregon side of the Siskiyou pass would have Shasta ancestors, and a Shasta on the California side would probably have a few Takelmas in his ancestral woodpile. When we put the issues this way, we realize we are not talking about "were they Shastas or were they Takelmas," but rather "were they more Takelman than Shastan," or vice versa, or a combination of the two. The Indians themselves, before the advent of contact with European state and national systems, probably didn't care. When the Rogues ceded their territory, they ceded this territory, while the Shasta claimed it after they clearly could not be recompensed for it.

Ethnographic Sketches

The Shasta

The Shasta are a group of people who speak a language of the Hokan phylum of languages. The Shasta occupy much of the Upper Klamath River and its major tributaries, the Shasta and Scott Rivers. The Shasta were divided into three major divisions according to the drainages they occupied. These were the Scott Valley division, the Shasta Valley division, and the division that lived along the Klamath River. There was another smaller division that lived across the Siskiyous in the Bear Creek drainage, although this may have been a late change.

The Shasta within the project area would have been closest to the Klamath River division. The Klamath River division included the area "from Scott River to the present-day town of Hornbrook" (Silver 1978:211). However, Silver mentions that "it is unclear whether the dialectally divergent Shasta living northeast of Hornbrook were affiliated with the Klamath River division (although dialect variation exists within the Shasta language, what correlation this variation may have with sociopolitical groupings is unclear)." (Silver 1978:211). This dialectally divergent group of Shasta are of course those in the project area.

The smallest unit of Shasta territorial organization was the individual settlement, or village. These often consisted of people related to one another, and sometimes consisted of only one family (Dixon 1907). These settlements were grouped together loosely into the divisions mentioned above. Each division had a headman, as did the larger villages (Silver 1978). Dixon (1907) states that the headmanship was hereditary, while Holt (1946) has information that only the Oregon (Bear Creek) division had a hereditary headman. Since being headman depended in part on having enough property to fulfill the obligations of the office, even if the position was not officially hereditary, the heirs of the headman would be in a good position to become headman. Silver (1978) is probably correct in stating the headmanship was determined by "loose hereditary succession" (Silver 1978:214).

At times the divisions worked together. The Shasta Valley and Klamath River divisions worked together in raids on the Modoc. According to Holt, the headman of the Bear Creek division was above the other headmen, and was called on when there was "Big Trouble" (Holt 1946:316). The descriptions of the divisions and the Shasta as a whole make it clear, however, that headmen did not have real authority over the Shasta of their divisions, but rather were "primus inter paribus." Neither the Shasta divisions, nor even less the Shasta "Tribe" formed a real political unit analagous with European political units like towns or states. The most important and primary unit of Shasta social structure was the individual village.

The Shasta family was "bilateral with a patrilineal bias" (Silver 1978:214). The Shasta had a concept of wealth. Items of wealth included dentalia, clamshell disk beads, deerskins, and woodpecker scalps. Wealth was necessary for social status. One could attain wealth by inheriting it, by procuring it through hard work, or by one of two kinds of exchange. These were exchanges of bride wealth paid for a wife, and wealth paid for injuries done to a person or a member of his family. Social status, bridewealth and injury payments were bound together.

A woman's social status, or the status of her immediate family, determined her bride price. The amount of money that should be paid for injury to a person was determined by the bride wealth paid for his mother. One could accumulate bride wealth by having a number of daughters or sisters in one's family, or by making it big in an injury suit (being paid for having someone in your family of high status killed). Clearly people who had wealth were worth more both as brides or injured persons and would stand to make out better in any exchange. These exchanges tend to help the rich stay rich and the poor poor. At the same time there were means that poorer people could try to accumulate wealth. The first was through hard work, accumulating food, deerskins, and woodpecker scalps. Secondly, Shamans were almost always women. If a woman in your family became a Shaman, she could bring a good deal of wealth into your family.

The Shasta had permanent semi-subterranean dwelling houses. These were about three feet deep, and were about 16 by 20 feet. They might be occupied by one or more families in the winter. In other seasons people lived in brush shelters, bark shelters, or simply "camped out" (Silver 1978:214). In addition to dwelling houses, all Shasta villages had a larger assembly house. This was a place where visitors could sleep and where a Shaman who had just gotten her power would dance. Some Shasta villages had a men's sweathouse. This was smaller than the assembly house, and was limited to men, although novice Shamans (who usually were women) could dance there. Finally, temporary sweathouses of "willow poles, pinebark slabs and skins, with an opening facing east" (Silver 1978:215) were used by both men and women.

The Shasta hunted, fished, and gathered vegetal foods. They caught salmon and trout, which were of major importance to them, in the Klamath. However, they also ate suckers, eels, crawfish, turtles and mussels. They hunted for deer, particularly in the fall. They hunted with bow and arrow, snares, and had drives where they drove the deer into corrals. They also hunted bear, mountain lion

and wildcat, and birds. They even gathered grasshoppers and crickets. They collected a number of vegetable foods. Acorns were an important staple. Other nuts, seeds, bulbs, berries, including gooseberries and manzanita were also gathered. When Shasta visited Shasta in other regions they took foodstuffs and products characteristic of their region and returned home with products of the region they had visited.

The Shasta had vision quests for young men, which were often repeated yearly for good luck. However, there is no indication that special sites were made in the mountains for these quests. Women also got power over "pains" that lived in the mountains when they became shamans, but again, there is no indication that special places were reserved for this. When Shasta died they were buried in family burial plots. If a person died far away he would be cremated and his ashes returned home.

The Shasta warred with each other sometimes; good relations prevailed between some divisions of Shasta. For instance, the Klamath River Shasta and the Bear Creek Shasta traded back and forth and intermarried, and the Klamath River Shasta and the Shasta Valley Shasta banded together to wage war on the Modoc. A low level state of warfare was maintained with the Modoc at all times, but women could and did visit back and forth between the groups in spite of this (Holt 1946). The Shasta traded with both the Klamath and the Achumawai, to the north and south of Modoc. Trade from these people included obsidian and dentalia. Some dentalia used by groups downstream on the Klamath River may have come to them by trade from the Dalles through the Klamath and Shasta.

The Modoc/Klamath

The Klamath/Modoc speak dealects of the Lutuamian language, which is part of the Penutian language phylum (Loy, et al 1976:6). This close relation linguistically corresponds to a belief among them that they have not been apart very long.

The Modoc and the Klamath intermarry to some degree, and meet to fish or gather marsh seeds at several parts of their territory. Some authors (Barrett 1910) have emphasized the unity of the Klamath and the Modoc, while others have emphasized their distinctness (Ray 1963). The Klamath and Modoc are distinguishable on the basis of a difference in reliance on the terrestrial resources, however, they are more like each other than either is like the Shasta, with whom we are contrasting them. In the following description we will touch on the Klamath, but the description will emphasize the Modoc, who controlled the territory on the east side of the Overview area.

The heartland of the Klamath and the Modoc was the Klamath Basin. This basin, or really series of basins, is occupied by marshy lakes created when the basins were formed in the Pliocene and Pleistocene (Peterson and McIntyre 1970). These include the Klamath Marsh, Williamson Marsh, Upper Klamath Lake, Lower Klamath Lake, Tule Lake, and Meiss Lake. These lakes are loosely connected or not connect at all by slow meandering streams like the Williamson and Sprague Rivers, and Lost River, which flows from Clear Lake to Tule Lake, where there is no channeled outlet, although water filters out through the marshy edges to find its way to the Klamath River.. Aside from a one-mile stretch of the Link River, flowing from Upper to Lower Klamath Lake, none of these rivers are fast moving. Only as the Klamath River flows out of the Klamath Basin at Keno does it begin to cut its way down to form the deep Klamath Canyon at the north edge of our project area.

The lakes and marshes were central to the existence of the Klamath and Modoc. The Klamath lived almost exclusively on aquatic resources from the lakes and marshes. The Modoc, particularly the eastern group, depended somewhat more on terrestrial hunting, but even they centered their life on the harvest of the fish and plants of the lakes and marshes.

The annual cycle of the Klamath and the Modoc began with the Spring run of

suckers or mullet. These fish were caught by the ton in the early spring, and provided the first welcome change in diet from the last of the stored food that had kept the Indians alive through the winter. Later, when the spring sucker runs were over, villages split up into families and fanned out over the lakes and marshes, gathering roots of camas and arrowroot, cattails and other plants. In late August, camas, ipos, and the waterlily seed, wocus, began to ripen. Wocus was an extremely important staple to both groups, but because the Klamath had more suitable marshes for wocus, they relied on it much more than the Modoc, who depended more on ipos and camas. In the late fall migratory fowl were hunted. In the fall berries were also harvested, and some deer hunting was done in the mountains. Later, people returned to their wintering places in protected spots, preferrably with water that stayed unfrozen all winter long.

The habitations of the Klamath and Modoc reflected this seasonal round. Their winter houses were semi-subterranean round structures with earth-covered conical roofs. These were entered through a ladder placed in a hole in the roof. Some spent the winter in mat-covered lodges that were not built over a pit. A few Klamath villages had sweathouses that were used by the neighboring region. Temporary mat-covered sweathouses were also constructed. In the summers people built mat-covered shelters while they moved around following the different foods that could be harvested in different months.

Both the Klamath and the Modoc had considerable arsenals of technical equipment adapted to this life. They built canoes of fir logs which were propelled either by paddles in the open lakes, or by a special pole with a split end held by a piece of weed or bone in the form of a Y which gave a better purchase on the muddy bottom in the marshes. They caught fish in dip nets, gill nets, and hook and lines. Nets were also used to catch migratory fowl, either by putting them on the bow of a canoe with a fire behind it which attracted

the birds, or by stringing it along the surface of the water and driving the birds into it. Special arrows adapted to skip along the surface of the water were used for duck hunting. The grasses and tules of the marshes were used to make a wide variety of basketry. These ranged from sandles and baby cradles to specialized baskets for gathering and winnowing wocas, and baskets designed for a gambling game played with sticks.

The winter settlements were the primary units of identification. Each house might house one or a few families. Groups of houses would have one or a few men who because of prosperity and oratorical ability would be accepted as leaders. Other people who had had dreams and undergone intitation would be shamans. Among the Modoc shamans were usually men; only post-menopause women could be shamans. Other men could be war chiefs. "Leaders" were never war chiefs (Ray 1963).

Villages in turn belonged to larger groupings. The Klamath were divided into six divisions (Stern (1965) calls these "tribelets"). The Klamath group closest to the western half of the Goosenest half, and the one that probably would have had rights on the territory fronting on the Shasta in the district, were the Klamath Falls or Link River division, centered on what is today Klamath Falls, at the outlet to Upper Klamath Lake. The Modoc also had three major divisions. The division that would have used the Butte Valley would be the Lower Klamath Lake division (Stern 1965, Ray 1963). These groups sometimes functioned together, particularly in war. There is no evidence that the entire Klamath or Modoc "Tribe" functioned as a political unit in prehistoric times.

The Klamath and the Modoc had friendly relations with each other, although at times particular tribelets of the Klamath or Modoc might be at war with tribelets either of their own tribe or with those of the other tribe. The Klamath had friendly relations at least at times with the Takelma and the Molalla. In the Fall

these groups would all meet on the area on the side of Crater Lake for peaceful berry picking. The Shasta were at war with the Modoc perpetually, but traded with the Klamath at times. The Modoc fought with the Shasta and the Pit River Indians, who also were at war with the Klamath. The Pit River Indians seem to have been victimized by the Klamath and the Modoc, who used them as a source of slaves. The Modoc kept slaves to work for them and sold them to the Klamath. The Klamath did not generally keep slaves to work for them, but instead took them all the way to the Dalles, where they traded them. This may have been part of how dentalium got from Vancouver Island to the Dalles, then to the Klamath Basin where it was traded to Shasta, who traded it down the Klamath River to the Yurok at the mouth of the Klamath River.

The Klamath and the Modoc both had the concept that one could obtain power through a vision. This was particularly expected at puberty. Both boys and girls would go out, particularly in the mountains, in search of visions. One of the activities they would engage in was piling rocks. They would also sleep on certain mountain tops that traditionally were good places for visions. Another way to get a vision was to swim in certain pools of water and then sleep by them. Both these activites might have taken place in the Goosenest district area.

Both the Klamath and the Modoc practiced cremation of the dead. The crematories were at regular places, usually near established villages, so they are unlikely to occur in this project area. However, when a person died far from home he might be partly cremated and then his ashes taken home. This is one potential way of identifying Klamath as opposed to Shasta sites.

Shasta in Culture Contact

The first whites through the Shasta country had little direct impact on the Shasta. The Hudson's Bay Company by and large dealt fairly well with the Indians, although at times its field leaders recorded their opinion that only by killing

a few Indians could one get their respect (Dillon 1975). In spite of this, Hudson's Bay parties did very little fighting. Paradoxically, they probably killed more Indians than the capricious miners who self-styled themselves "exterminators." This was because the Hudson's Bay parties introduced European diseases to which the Indians had no genetic resistance. As a result, before the Gold Rush, travellers through the region report whole villages of Indians decimated by disease (Dillon 1975). However, the coup de grace was delivered by the discovery of gold.

The monstrous influx of whites into Siskiyou County after the discovery of gold spelled the doom for the Shasta. Conflicts between Indians and whites ranged from individual incidents in which (typically) an Indian attempted to steal horses, or individuals or crowds of whites shot or lynched an Indian for no particular reason to campaign against groups of whites either because of attacks, or because of an aggravated situation. Most of these incidents took place outside the Goosenest district, because most of the miners were concentrated outside the Goosenest district. There was one major campaign between a group of Shasta and various groups of whites that did take place within the boundaries of this overview. This was the Cave Fight of 1853-54. This engagement serves as a sort of microcosm for Shasta-White conflict in all of Siskiyou County. Participating in this series of incidents were several groups of Shasta, white troublemakers, "volunteers" (really almost vigilante) white armed groups, the regular army, and whites and Indians working for peace between the two groups. The incident has also been recounted in several different versions by different people, giving different versions, for instance, of the effectiveness of the Army's howitzer (Wells 1881, Hessig 1965).

Apparently, the incident began with a group of "Squaw men" (whites who were living with Indian women) whose wives returned to their people of Bill's band of Shasta, who lived on the northern side of the Klamath, in a large cave at the mouth of Fall Creek (Wells 1881). The Squaw men could not prevail on their

wives to return to live with them, so they went to Cottonwood (the present Henley-Hornbrook) and raised a large group of armed men to attack the band by saying that they had seen stolen livestock at the cavemouth. The group was repulsed in their attack and driven back to town with four dead and several wounded.

With the indignation over the dead and wounded, a much larger force was raised, and a regular Army detachment, under Captain Smith, of Fort Jones, was sent for. In addition, "A company of volunteers was organized, commanded by Capt. R. C. Geiger and Lt. James Lemon" (Wells 1881:134-5). The volunteers apparently rushed up the north bank of the Klamath and took up position on top of the cave, where they exchanged shots and peered over to see the effect on the Indians of the shots. During one of these assessments, their captain, R. C. Geiger, was shot in the head and killed.

In the meantime, the regular troops showed up across the river and set up a howitzer. Coordination between the regulars and the volunteers was poor to nonexistent, so the first shell fell among the volunteers. Several more shells were fired, achieving the effect of clearing the volunteers out from around the cave, but apparently with little effect on the Indians in the cave. In later versions of this story, the Howitzer is supposed to have brought about capitulation (Hessig 1965).

Before the hostilities progressed any further a trapper named "Old Man Robinson" who knew about the original cause of the conflict talked with Captain Smith, the commander of the regulars. When Smith realized that the whole trouble was started by the Squaw men, he became greatly incensed, then announced "The United States Army could not be used to capture squaws with" (Wells 1881: 135). He then ordered the troops home, and apparently the volunteers went home as well.

Later the same year Indians from Tipsu Tyee's band (the Bear Creek Shastas who apparently made their headquarters on "Siskiyou Mountain") assaulted a white woman and attacked a pack train, killing one man. Lt. J. C. Bonnycastle took a detachment of soldiers to go to the cave to capture the Indians involved in these attacks. They were joined by an Indian named "Old Tolo," who offered to act as an intermediary to get the Indians to surrender without a fight. Old Tolo succeeded in getting Joe, the Indian who had attacked the white woman, to come out, but he missed connections with the troops. However, it turned out that the four Indians from Tipsu Tyee's band who intended to enlist the Indians of Bill's band at the cave as allies, were instead attacked by Bill's band, and three of them were killed by the Indians in the cave. The fourth escaped.

The soldiers returned to Fort Jones because the Indians had done their work for them. At this point, it was discovered that Joe, the Indian who had attacked the woman, had returned to the cave when the soldiers did not meet him and old Tolo. Lt. Bonnycastle, M. M. Rosborough (special Indian agent, and a figure who had the confidence of Indians, including Captain Jack and the Modocs (Murrow 1959)), and Elijah Steele, together with Old Tolo went up to the cave to try to get the whole group of Indians to go to Fort Jones.

Apparently the winter of harassment by whites and perhaps agitation by visiting Indians like Joe had changed the attitude of Bill's band. They appeared on the (eastern?) bank of Fall Creek "making hostile demonstrations and giving vent to their feelings by demonical yells" (Wells 1881:135). A long preliminary discussion ensued about who was to cross the swollen Fall Creek and how. Finally, trees were felled from both sides, and the Indians crossed to where the whites were. The situation began to degenerate, and guns were levelled at the whites, who had recourse to a unique strategem.

> Hastily unstrapping their revolver belts, they threw them as far to the rear as they could, and stood up unarmed and defenseless. The chief sent

> an Indian to gather them up and return them to the owners, who immediately threw them away again. Then, baring their breats, they said, "Shoot! Why don't you shoot? You know we are unarmed and defenseless; you could kill us without any danger to yourselves. We came among you, trusting you to your honor, to hold a council; buy why don't you kill us and thus prove yourselves to be squaws and not warriors. You can kill us easy enough, but our blood will be avenged by the death of the last warrior in your tribe." By such taunts as these they shamed the Indians and saved their lives . . . (Wells 1881:136).

Old Tolo then talked the Indians into going along with the whites' suggestion that the group come out. The whites left with the intent of sending a detachment of troops to protect the Indians while they went to the fort. Before the troops could arrive, another white, "Captain Goodall," who was one of the unhappy Squaw men, showed up and announced he was there to escort the Indians to Fort Jones. The Indians believed him and followed him to Cottonwood, where they were attacked by civilian whites.

This story took place entirely in or near the Goosenest district. It is a microcosm of Indian-white relations during this period. It shows the elements of white and Indian groups that interacted. Neither side was monolithic. The white "volunteers" often worked at cross purposes to the soldiers, and broke promises made by regular army or civilian authorities. The Indians included groups like Tipsu Tyee's band who committed acts of depredation against the whites while other groups like Bill's band refused to take part in these acts, and even punished Indian offenders against the whites before the whites could. There were individual men who commanded the respect of the Indians who could go with impunity among groups of hostile Indians and conduct negotiations and who had their counterparts among the Indians like Old Tolo. Unfortunately, the lack of monolithic structure meant that neither the Indians nor the whites had any central person or group who could make policy or treaties that they could enforce for the rest of their people. Since the whites were both more numerous and much better armed than the Indians, each time conflicts broke out, the Indians came out on the worst end.

Modoc in Culture Contact

The Modoc bore the brunt of early settlers coming through the Klamath Basin. The Applegate Trail passed through the heart of the Modoc country, crossing the Lost River at the Natural Bridge Ford in the heart of Modoc territory. The trail passed through the Modoc country precisely because the Modoc country had more dry land and less marsh than the territory of the Klamath. Because the Modoc depended more on terrestrial game than the Klamath, they were more affected by the game being killed and scared off by the settlers passing through. Again, because more of the Modoc land was dry and grazable, even farmable with irrigation, settlers early threatened to settle more in territory important to Modoc than in Klamath territory.

As a result, for years the major drawback of the Southern Emigrant Trail laid out by Applegate was that the Modocs consistently attacked trains that came though their territory, killing men and women, capturing or killing children and stealing hundreds of head of stock. By this time there were two major bands of Modoc, one under Old Schonchin, and the other under Keintpoos, or "Captain Jack." Captain Jack's band were in the Tule Lake and Lost River valleys, so they bore the direct brunt of the settlers, and were probably one of the major hostile groups.

The Rogue River War of the 1850's and the ending of the Civil War in the eastern U.S. meant that gradually the Army and the government began to devote more energy and were able to make a more impressive show of force to the Indians of the Klamath Basin. However, the different agencies of the United States and the State of Oregon worked at cross purposes with one another and quarreled bitterly over what to do with or to the Indians.

In 1864 Captain Jack went to Judge Elisha Steele to try to make a treaty with the whites. Steele had been Indian Agent, but had no official capacity

over the Indians at this time. Nevertheless, he negotiated a treaty with Captain Jack. The Indians agreed to stop their depredations, and confine themselves to a reservation along the Lost River. This treaty in hindsight seems to have offered a lot of hope for peace in the Klamath Basin. However, it was not ratified by the white authorities because of jealousy of Steele by the Office of Indian Affairs, and, perhaps more importantly, the whites were unwilling to cede any of the rich land along the Lost River. As a result, the treaty was ignored. As Murray (1959) points, out, there is no way of knowing if Jack would have really observed the treaty, but it is at least equally possible that recognition of the Steele Treaty might have prevented the Modoc War which later broke out.

In 1864, instead, Indian Superintendent J. W. P. Huntington negotiated a treaty with a large group of Klamath, Modoc and Paiutes. The Modoc and Paiutes signed under considerable pressure, for the treaty did not give them any of their own land in the reservation. Instead, the reservation took in nearly the entire heartland of the Klamath territory. The Modocs under Old Schonchin were favored by the authorities because Schonchin was more cooperative, while Captain Jack got considerably less favorable treatment. In 1865 Jack took his band of Modoc off the reservation and returned to the Lost River. In 1869 the Indian Superintendent managed to persuade Jack and his band to return to the reservation. However, here relations with the Klamath were bad, and by Spring of 1870 Jack persuaded nearly all the Modoc to return with him to the Lost River area. About half of these drifted back to the reservation under Old Schonchin. The rest remained in the Lost River and Lower Klamath Lake area. The Modoc harassed settlers, taking stock, demanding payment, and invading houses. They demanded that the whites pay them rent for the use of Modoc land. Nothing was done for several years. However, in November of 1872 a small

detachment of Army attempted to arrest Jack and his followers. After a tense armed confrontation, fighting broke out, and the Modoc fled to the Lava Beds. In the process they attacked and killed a number of unsuspecting settlers, who had not been warned by anyone that the Army was going to open hostilities with the Modocs. The Modoc War had begun.

Captain Jack and a group of Modoc holed up in the Lava Beds, just east of the project area. Here Jack, with a force that never exceeded 70 fighting men, succeeded in holding off nearly 1,000 troops for almost a year. They won several major battles with the regular Army without losing a man, and when they finally were defeated were able to scatter in small bands and filter through the "seige" of the white soldiers. Ultimately, all of the Modocs were captured or surrendered. Those who had stuck with Jack were ultimately sent to a reservation in Oklahoma. Jack and three other Modoc leaders were hanged at Fort Klamath.

The closest this conflict came to the project area is that after the Modoc left the Lava Beds, the Hot Creek band hid out for awhile on Sheep Mountain in the Butte Valley, east of the project area. In addition, during the conflict there would have been increased traffic both of participants and observers of the hostilities coming over from Yreka, and of teamsters bringing supplies for the Army and its hanger's on.

B. Fur Trappers and Early Explorers

The first Europeans to reach the Goosenest district were probably trappers from the Hudson's Bay Company. The Hudson's Bay Company, concerned with the increasing encroachment on the Northwest by American trappers, deliberately set out to explore and at the same time trap out all the lands south and east of their establishment at Fort Vancouver. They sent a number of expeditions with the dual goals of exploring unknown country and trapping it out to create a "Fur Desert."

In the winter of 1826-27 Peter Skene Ogden travelled east of the Cascades to the Klamath Basin. After exploring Upper and Lower Klamath Lakes and Willow Creek, he led his men down the Klamath River Canyon. One of his trappers burned a finger in the Shovel Creek Hot Springs. They made a camp "at the rapids marking the limit of ascent of salmon in the Klamath" (Dillon 1975:51). This would be around the present Capco Dam site. Ogden left the Klamath at Camp Creek and skipped over to Cottonwood Creek.

The trip through the Klamath Canyon must not have impressed Ogden, as none of the later Hudson's Bay travellers repeated it. In 1829 McLeod came down the Rogue and crossed over what is today the Dead Indian Plateau east of Ashland and Medford between the Klamath and the Rogue Rivers. He then continued down east of the project area, where he followed the Pit River to the Sacramento drainage. He returned up the Shasta Valley and over the Siskiyou Pass to the west of the project area. This became the pattern for other travellers. In 1833 John Work returned from California up the east side of the project area, camping at the foot of Sheep Rock in the project area, before continuing up the Shasta Valley and over the Siskiyous (Dillon 1975). Ewing Young, an American trapper, brought a herd of horses, and later cattle, up this route to the west of the project area (Wells 1881). The fact that most people went around the project area shows that this part of the Goosenest district is a formidable barrier to travel. Even the high Dead Indian Plateau was preferred to the Klamath Canyon.

The United States did not have a government franchise like the Hudsons' Bay Company to map out the Northwest for them while engaged in their duties, so they sent in military personnel. These people produced the first accurate maps and some routes and were perceived (correctly) by both the British in Fort Vancouver and the Mexicans in California as spies, although in general they were treated decently by both parties.

John Fremont in his expeditions in 1845 and in 1846 seemed generally to have passed to the east of the project area, and when he was called back to California for his filibustering part in the California takeover, went down by way of the Pit River (Jackson and Spence 1970). Lieutenant Emmons, on the other hand, came over the Siskiyou summit route and passed west of the project area on the Siskiyou Trail (Dillon 1975).

Finally, John Muir had an extended love affair with Mt. Shasta. He returned to it several times, and his descriptions were instrumental in getting Shasta protected by the government. However, his travels were largely south and west of the project area (Muir 1975).

C. Settlers

The history of early settlers in the Goosenest district project area is really two histories. The spine of the Cascades divides the western half of the Goosenest district and separates two areas of flat land suitable for early farmers and stock raisers. On the west side of the Cascades the project area includes the head of the Shasta Valley, while on the east the project area includes the Butte Valley. A few ranches were also established in the Klamath River canyon. The spine of mountains between these two valleys has been a barrier to settlement and communication.

The Little Shasta Valley was first settled by John B. Rohrer in May, 1853 (Wells 1881:209). He was followed by a number of other people. The valley was farmed and a flour mill was built before 1881 on the Little Shasta River.

Across the mountains in the Butte Valley settlement was slower. The Butte Valley was in the territory of the Modocs, who were objecting so effectively to groups of settlers coming in on the Applegate Trail from the east. J. Hargrove spent the winter of 1859 in the Butte Valley with a herd of Oregon cattle. J. A. Fairchild, G. W. Hard and I. S. Matthews took a large herd of cattle and

horses into the valley in 1861, which led to the establishment of the Fairchild Ranch. In 1862 P. A. Dorris and the Ball Brothers settled in the Butte Valley. Fairchild and Doten first settled on the ranch south of Meiss Lake. Later, Fairchild sold out to Doten. Dorris (for whom Dorris, California, is named) and Fairchild got along fairly well with the Modoc. In the period prior to the Modoc War, the Modoc were living in their old territory, harassing settlers and demanding protection money from them. Apparently Fairchild paid and the Modoc left him alone. During the Modoc War Fairchild was one of the whites with whom the Modoc negotiated, and at the end of the war, when the fragmented bands of Modoc were surrendering, they repeatedly made a condition of their surrender the presence of Dorris or Fairchild, who they knew and trusted, to see they would not be murdered after surrender. In the early hostilities the fact these men were well known to the Indians is shown by taunts the Indians shouted at the attacking forces of volunteers, which at that point were composed largely of Fairchild's and Dorris' employees.

> Said Steamboat Frank, "Hello! Charley, here is some Yreka boys, don't you see them?"
> "Yes."
> "Boys what do you want? What makes you come here to fight us? Charley, are you going to fight us?" Steamboat punctuated each question with a rifle shot, then continued. "What's the matter with Dorris? Can't you hear?" (Bang!) "Can't you talk?" (Bang!) "Aint you got a mouth?" (Murray 1959:123, quoting Yreka Union, February 15, 1873).

Several ranches were established in the Klamath River Canyon between the Shasta Valley and the Klamath Basin. The largest of these was originally called Shovel Creek Hot Springs, and was located at the mouth of Shovel Creek. It was farmed by Richard Beswick from 1873 to 1887. Beswick started the resort later called Klamath Hot Springs at Shovel Creek. The ranch was reportedly sold in 1887 to the Edson Brothers of Gazelle (Beswick 1963, Hessig 1965).

The Double Heart Ranch, located upstream from Shovel Creek on the Klamath, was begun by Louis V. Hessig in 1884. When the Pokegama Log Chute was built on

the north side of the river, they sold slaughtered beef to the lumbering crews (Dow 1963). Other small ranches include the Jones ranch "in the Bogus area" and the Lennox, Ward and Spannus ranches, which were covered by Copco Lake. The Spannus ranch also suppled meat the the Pokegama Logging camp while it was in operation (Glover 1963).

Settlement began early in the head of the Shasta Valley, which is also in the project area. A number of journals from members of a wagon train that came across from Illinois in 1854 report stopping at the R. B. Snelling ranch, near Sheep Rock, after crossing the country via Goose Lake, Lost River, Butte Valley and Sheep Rock. All recall buying potatoes from the Snelling ranch, which they enjoyed after their long trip without fresh vegetables. R. B. Snelling began as a miner at Scott's Bar, and later was a trustee for the City of Yreka shortly after it was incorporated (Wells 1881). The Snelling ranch is the Coonrod ranch of today.

At the beginning of this century the Butte Valley Land Company was formed and began to advertise to attract settlers and sell them land. A number of members of the Church of Brethren, or the Dunkards, came in to settle around MacDoel. The Dunkards and the other early settlers who bought land they had to farm had a hard row to hoe. First, the Land Company had not got its title to the land completely clear, and the titles were in litigation for some 20 or 30 years. Secondly, the older ranchers, especially Fairchild and Dorris, who had been using the land as open range, didn't take kindly to having it settled. Their riders harassed the settlers unmercifully (Thackara 1957). The land needed irrigation, but few of the settlers had enough capital for irrigation, and when troubles came up went broke and moved out. Nevertheless, the group of brethren grew and prospered for a time. Their church begain in 1906 with 13 members, but soon grew to over 100 members. However, as problems

grew members began leaving the Butte Valley, and by 1920 they were down to a handful again. The church building burned down in 1932, and the church was officially disbanded in 1947 (Huffman 1957).

The central spine of mountains that forms the heart of the project area was not suitable for farming or settlement. It affected settlers in the neighboring valleys in two ways. It was a barrier which they had to cross with their produce and livestock, particularly from the Butte Valley and points north and east. This will be discussed in the section on transportation. Secondly, the high meadows were and are used for pasturing sheep and cattle. As part of this process trails and fences were built, and cabins were built in the high mountains.

There is considerable evidence that sheep were important in the early part of this century. Sheep were in the Klamath Valley by the 1880's, though they became more important after 1900 (Wentworth 1948). At the time that the Goosenest district became part of the National Forest both sheep and cattle were grazing in the western part of the Goosenest district (Ball Mountain Range Allotment Plan 1961). The names of places on the map attest to the location of sheep camps. Poison Spring refers to a spring once poisoned by cattlemen to get rid of sheep (Gail Egolf personal communication). The upper crossing on Shovel Creek crossing was originally called "Ager Sheep Camp" (Edwards 1957). Two bands of sheep herded by Basque herders operated near Martin's Dairy in 1915 (Dow 1964).

Poison Springs illustrates the conflict between cattlemen and sheepmen. However, the Martin's Dairy operation raised both sheep and a herd of 200 cattle that supplied the dairy (Dow 1964). In the long run, cattle seem to have supplanted sheep. By 1949 graphs of allotments for grazing by the National Forest show no sheep (Ball Mountain Allotment Plan 1961). Perhaps this triumph of cattle over sheep explains why there is so little mention of sheep in the histories recorded in the Siskiyou Pioneer, even though sheep have left such a mark in the nomenclature of the landscape.

D. Transportation

The mountainous spine of the Cascades that forms the heart of the project area formed and forms a major barrier to communications from between the Shasta River Valley and the Klamath Basin. There are three natural routes for communication to follow. The first, the Topsy Grade, parallels the Klamath River Canyon, the route first traversed by Peter Skene Ogden. Because the canyon is so steep and entrenched, the route of the road passes high above the canyons in several places. The thick, sticky clay that forms the soil along the route made this route difficult if not impossible in winter and spring. However, the Topsy Grade was an important link between Klamath Basin and the Shasta River Valley.

A second route across the Cascades was the Ball Mountain Road. This cut across the southern end of the Butte Valley south of Mount Hebron. It climbed the valley of Prather Creek and followed around the foot of Ball Mountain, then descended the Little Shasta River to the Shasta Valley.

The third natural route follows the route of the Southern Pacific Railroad tracks and Highway 97. This cuts through the Butte Valley, circles through the Round Valley south of Orr Mountain, then crosses the Cascades south of Grass Lake and descends into the head of the Shasta Valley. The immigrant trail of the 1850's crossed from Tule Lake via the Red Rock Valley to join this route just north of Orr Mountain. The immigrants followed the same pass as the railroad, but when they rounded Sheep Rock at the southern end of the Shasta Valley they turned northwest and headed for Yreka (See map 2).

All three routes were used by early settlers going east and west. Herds of cattle were first driven north to the Butte Valley and areas in Eastern Oregon. Later cattle drives brought herds from Northeastern California and Southern Oregon over the Ball Mountain Road or down the Old Immigrant Road to the railroad in the Shasta Valley. Gazelle and Montague were important loading points.

Railroad

There are two railroad lines that pass through or near the project area. One is the old lumber railroad that once brought large logs from the Dead Indian Plateau to the Klamathon Mill. The other is the railroad from Weed to Klamath Falls. Both served important roles as routes to the Klamath Basin. For a long time the train from Yreka to Klamath Falls involved three different means of transportation: railroad, stage coach, and steamboat.

The Klamathon Mill sawed timber logged east of the mill and north of the Klamath River. The timber was cut on the high plateau north of the Klamath. The logs were then dropped down the Pokegama Log flume to the Klamath where they were floated down to the mill. At first horses and big wheel carts were used to haul logs to the head of the log flume, but later as trees were cut further and further away, a small railroad was built to bring logs to the head of the flume. At first the cars on the track went down by gravity and were hauled up by horses. In 1893 a locomotive, "Old Blue," was added to the road (Jones 1971, Klamath Echoes n.d.). In 1901 a railroad was begun that was to go from Klamathon to the Klamath Basin. The mill at Klamathon burned in 1902, but the railroad pushed on and by 1903 had reached Pokegama. At this time the passengers could take the train from Thrall (two miles south of Klamathon) to Pokegama, where they transferred to a stage which took them to Keno. At Keno they boarded a steamboat that took them to Klamath Falls. For a time this route was successful enough to usurp almost all the traffic that had previously passed over the Topsy Grade, south of the Klamath, or the Greensprings Highway (Highway 66) from Ashland to Klamath Falls, north of the Klamath River. Two factors led to the abandonment of the route. The first was the burning of the mill and town at Klamathon in 1902, which was the original reason for the railroad's existence. The second was the growth of the route from Weed to Klamath Falls.

As this route, over a much more level pass, got closer to linking with Klamath Falls, the Pokegama route lost its support and soon was abandoned. Rails were reused in several other logging railroads (Klamath Echoes n.d.). It was briefly revived when the Copco Power Plant was built.

The history of the Weed Railroad parallels the history of the Pokegama Railroad. Like the Pokegama Railroad, the line was originally begun as a logging railroad. In this case the railroad also had a great deal to do with the success of the lumber company that built the railroads.

Abner Weed began a mill in what is now Weed in 1900. This mill prospered when Weed got a contract to cut ties for the Southern Pacific Railroad. In order to get timber, Weed began construction of a railroad line towards Grass Lake. In 1904 it was rumored that the ultimate destination of this railroad was Klamath Falls. In 1905 the Weed Railroad was passed to a new organization called the Klamath Development Company, although Weed remained an important figure in the company. In the same year the California-Northeastern Railroad Company was incorporated, with stock that belonged to the officials of the Klamath Development Company. The railroad had reached Grass Lake, where it was connected by stage to Laird's Landing, on Lower Klamath Lake. From Laird's Landing the steamer Klamath carried passengers to Klamath Falls. In 1906 it was announced that the Southern Pacific had purchased the California-Northeastern Railroad. Considering Abner Weed's short ownership of both the Weed Lumber Company and the railroad, and his early and long association with the Southern Pacific, it has been suggested that the California-Northeastern Railroad was always a front for the Southern Pacific which enabled them to acquire property quietly and cheaply in advance of the tracks (Klamath Echoes n.d., Good 1941). By 1909 the train had reached Klamath Falls.

The Klamath line was to continue to Portland via the Natron Cutoff, just

south of Eugene. However, it was not until 1926 that the connection was finally completed. This was in part because of machinations on the part of the railway companies, and partly because of an anti-trust suit brought against the railroad by the federal government. Interestingly, when the Weed-Natron cutoff, which avoided the Siskiyou Summit and its difficult grades, opened, the old route down through the Rogue and Shasta Valley began to decline, and towns like Ashland and Hornbrook, which previously depended on the railroad, began to decline. Today passenger trains no longer pass through Ashland, but instead follow the Natron-Weed cutoff through Klamath Falls, and then along the eastern boundary of this project area (Jones 1971).

E. Logging

In many ways the heart of the western half of the Goosenest district has presented negative aspects to man. It is too cold to live in year round. It is a barrier to communication. However, its heavy cover of trees has been and is its major useful resource to man. Indians used trees to build houses, canoes and tools. The first whites built houses from them as well as bridges and tools. At first these were hewn with axes, but soon saw mills began to turn out rough sawn lumber. To the east timber was sought after heavily for use in mining construction, but in the western part of the Goosenest trees were chiefly used as needed for building shacks and buildings for seasonal herding in the mountains, and for improvement on the routes that cut through the mountains.

The history of logging on the west coast began with a great development of logging along the coast, where logs could be floated down to mills at the mouth of streams on the coast, and the lumber could be transported by ship to markets in San Francisco and the Far East (Cox 1974, Lucia 1965). The history of early logging records the development of innovative techniques to log ever higher on ever smaller streams. This culminated in elaborate log flumes to get logs from

high on the slopes to the rivers that could float them to the coast, and the development of systems of dams which accumulated logs all winter and then sent them roaring down tiny stream beds in great flash floods in the Spring. All of the project area is far too far from the coast for these to have been applied. As a result, logging was done solely for local markets. At this time because of the difficulty and expense of transportation, it was economical to take the mills into the forest rather than bring the logs to large central mills.

The railroad played a complex symbiotic role in the development of logging in the region. First, the railroad created a major demand for wood. Wood was needed for ties, for fuel (the early trains were wood burning), and for major constructions like trestles. Many early mills such as that of Abner Weed, were set up, flourished, and died as the railroad was pushed through the moutains, first to the west of the project area and then to the east.

Secondly, the railroad opened up the region to larger markets. This led to a great increase in the importance of logging to the region. Just as the coastal forests began to reach their limits of exploitation, the railroads made it possible for the lumber from the hinterlands to be exported to the large coastal markets. At the same time the Eastern timberlands in the South and the upper Midwest were almost exhausted and a great need for timber in the East developed (LaLande 1979). At first high railroad tarrifs made it difficult for the Western timber to compete in the Eastern market. Eastern markets also demanded higher standards of milling and had less use for rough cut lumber (Cox 1974). This made central mills important. However, gradually tarfffs were lowered. The old small, shifting mills continued, but they couldn't compete with the large centralized operations.

Thirdly, the railroads actually supplied a means to get logs out of the forests. As early as 1903 (Lewis 1967) railroad grades began to be constructed

for the sole purpose of logging in the district. Extensive remains of these railroad grades can be found in the eastern and western half of the Goosenest district. These have been mapped from aerial photos (see Cultural Resources Atlas, Klamath National Forest).

At first logs were brought to the railroad by horse or oxen drawn big wheels. Later stationary or train-mounted donkey engines skidded logs down to points along the railroad, where they were loaded onto trains. This left a characteristic radial pattern of skid roads around each of the stations along the line where the logs had been skidded. Other features associated with railroad logging are camps where the loggers lived, and various locations associated with the maintenance and construction of the railroad itself. These ranged from portable workshops to the great workshop and roundtable at Tennant.

The technology of logging also improved and changed over time. At first the axe and hand saw were used exclusively for logging. When transportation was nearly impossible, and trees were nearly worthless, the log cabin, finished with the broad axe, was a common form of construction in the district. The technique of squaring, splitting, and notching logs to make a log cabin using only axes, adzes and saws is a technique which was brought in by a number of people with different traditions, each of which were reflected in the log buildings they constructed. As the forests became more accessible, and milled lumber became more and more common, these labor intensive techniques fell into disuse.

As logging increased in importance techniques changed. At first, when trees were worth little, larger trees were cut high up the trunk. This saved the trouble of cutting through the swelling buttresses at the foot of the trunk, which added several feet of sawing to each tree. In order to cut trees this high, a series of holes were cut into the trunk of the tree, and springboards--long planks with an iron, semi-circular shoe that gripped the upper edge of the hole--

were inserted. The springboard then served as a platform from which the next cut was made. The tall stumps with the characteristic notches for springboards can still be found in some parts of the forest. These form transitory monuments to past practices, as well as a clue to the period when the area where they are found was first logged. Later machine powered mobile saws were developed, culminating around World War II with the hand held chain saw. This has revolutionized the whole industry of tree falling. The mini-revolution of techniques of falling and trimming that have developed since the hand-held chain saw is a subject that deserves recording while the men who developed the ways to use this new tool are still around.

One of the largest and most important early logging companies began in the southern part of the district. In 1900 Abner Weed, who had previously been operating a mill in Sisson (the present Mount Shasta City) established a mill a few miles north in what became the town of Weed. This mill did modestly well unitl Mr. Weed got a contract to cut railroad ties for railroad construction from the Southern Pacific. The Weed Lumber Company did so well at this that they constructed a new mill in 1902, and began a logging railroad towards Grass Lake in 1903-1905 (KTamath Echoes n.d., Lewis 1967a, b). This railroad opened up much of the forested land of the district, as well as ultimately forming the basis for the railroad line from Weed to Klamath Falls. Mr. Weed did so well at collaborating with the Southern Pacific that he was able to sell out in 1905 to a Mr. Long and a number of other stock holders (Klamath Echoes n.d.), "so as to devote his time to his many land and timber holdings" (Lewis 1967a:2). The Weed Lumber Company formed the nucleus of the Long-Bell Lumber Company which was responsible for much of the logging in the western half of the Goosenest.

In 1888-89, the Klamath River Lumber Company set up a mill and log dam at Klamathon just east of where Interstate Five crosses the Klamath today. The dam

washed out in the flood of that winter, and had to be dynamited to save the mill buildings. It was rebuilt and a large tract of timber land was acquired up the Klamath River, in the northern part of this project area. By 1892 a log flume, the Pokegama Log Chute, had been constructed. This chute was 2,650 feet long, and dropped logs 834 feet from the Dead Indian Plateau to the Klamath River. The logs were then floated down through the rapids and falls of the Klamath River 20 miles to the mill at Klamathon. At first horses and big wheels hauled trees to the head of the chute. Later, a small railroad was constructed to bring trees from farther off to the head of the log chute. At first this railroad lowered cars loaded with logs by gravity, and raised the empty cars with horse power. Later a steam engine was added to move the logs and cars. Still later, in 1901, construction began on a railroad to connect the Pokegama Log Chute spur with the timber lands on the Dead Indian Plateau and the Klamathon Mill. This railroad went on being constructed when the mill and town at Klamathon burned down in 1902, even though the mill was not rebuilt. This railroad served for logging for a number of years, as well as being a link on one route to Klamath Falls.

Truck logging began as early as the 1930's. Truck logging became more economical than railroad logging. However, railroad logging continued until as late as the 1950's in the area. Many of the roads use existing railroad grades. Today, of course, logging uses roads and trucks and, now, such new and innovative methods as helicopter logging, which should create new kinds of logging associated features.

F. Forest Service

In 1891 the Forest Reserve Act of 1891 gave the government authority to create forest reserves. In 1905 the administration of forest reserves was passed from the Department of the Interior to the Forest Service, under the Department

of Agriculture (Steen 1976). In the same year the Klamath National Forest was created. The part of the Goosenest under consideration in this paper was part of the original Klamath National Forest. Interestingly, the eastern portion of what is now the Goosenest Ranger District, then called "the Antelope District," was part of the Shasta National Forest. In 1934 the western portion of the Goosenest district was combined with the Antelope district, and, under the name, "Goosenest Ranger District," was placed in the Shasta National Forest. In 1953 the entire Goosenest Ranger District, including the former Antelope District, was returned to the jurisdiction of the Klamath National Forest.

The Forest Service took responsiblity for managing the lands of the Goosenest Ranger district "from the standpoint of the greatest good of the greatest number in the long run" (Steen 1976:75). In practice this involved the Forest Service in regulation of logging, grazing, mapping their lands, constructing roads, managing recreational use, and attempting to control fires. All of these activities have left their marks on the region.

One of the early problems the Forest Service was faced with was simply mapping and monumenting the forest. Surveyors' monuments marking corners of sections and smaller units give a miniature history of these efforts.

A second problem the Forest Service was faced with was establishing a way to administer the district. Just as the mountains of the Goosenest presented an obstacle to earlier communication, it made management by the Forest Service difficult. In order to solve this, guard stations were built throughout the forest so that personnel could be near the parts of the forest they were trying to manage. Typically, these guard stations were fairly self-sufficient, with quarters for the men, and facilities such as corrals and barns for horses and mules by which the Foresters travelled.

One major task of the men at the guard station was control of fires.

Lookouts were established on natural eminences. These lookouts were hooked up with each other and with guard stations by a network of phone lines. The insulators and wire from these phone systems can still be found in the forest. Another feature associated with fire fighting are camps for fire fighting crews. These camps were often associated with guard stations.

The Forest Service also built camps for recreationists. In the 1930's the CCC was employed building camps, trails and roads in the district. These camp grounds have a number of features ranging from networks of stone-lined paths through privies and fireplaces to administration buildings.

The regulation of use of forests, particularly of logging and grazing, has changed as Forest Service policies have developed over the years. These changes are reflected in old signs marking limits of cuts or grazing areas that can still be found in the forest, and can also be seen on a regional level in plots of logged lands in different states of regeneration which are distributed and logged in accord with the policies in effect at that time.

More recently the extensive construction of roads through the forest, and the vast improvement of accessibility as well as technological innovations such as airplanes and portable radios have led to the abandonment and in cases, destruction, of guard stations and lookouts. Horse barns and corrals are no longer a regular feature of guard stations, nor are rangers required to pass tests of shooting, axemanship, horsemanship, and throwing a diamond hitch (Steen 1976:83). Firefighting still uses large camps of men, but they can be quartered much farther from the forests, and their work is supplemented with extensive use of airplane drops of fire retardent. These changes are reflected in the kinds of structures maintained by the Forest Service and those no longer maintained.

G. Recreation

The one thing that everyone from the earliest settlers on agreed about was the beauty of the mountains. The earliest settlers, like the Indians before them, hunted and fished the mountains and rivers of the region. The deer, bear, and elk of the mountains, the salmon and trout of the rivers, and the ducks and geese of the lakes formed an important part of the pioneer diet. However, as the country became more civilized, fish and game played less of an important part in the economy. Hunting for large game and fowl, and fishing increasingly became more of a recreational activity than an economic one.

The hunting and fishing of the Goosenest district are exceptional. Large game include deer, elk, bear, and gazelle. Meiss Lake and the Klamath Basin are on the Pacific flyway and are visited annually by millions of migratory geese and ducks. The Klamath and its tributaries are famous for the salmon and steelhead that ascend them annually. The fame of hunting and fishing soon spread. Others came to the region simply to enjoy the beauty of the region. John Muir fell in love with Mount Shasta, and his writings popularized the mountains of Northern California (Muir 1975). The mountain air, and the water of mineral springs were thought to have curative effects on people who lived in less fortunate areas. A number of lodges were developed that catered to hunters and fishermen, health seekers and simple tourists.

One resort was located at the mouth of Shovel Creek in the Klamath Canyon. Klamath Hot Springs on the Topsy Grade was based on three hot springs and one cool one. The water from the hot springs is too hot to touch (one of Peter Skene Ogden's men burned his finger finding this out), but by mixing in water from a cold spring, both hot baths and hot mud baths were developed.

Klamath Hot Springs became the property of Richard Beswick in 1873. Because the property was on the Topsy Grade, a hotel was built at the hot springs.

Jones (1971) dates this hotel to 1881, not to 1870 as Hessig (1965) says. In 1887 the property was sold to the Edson Brothers, who built a larger hotel. This had seventy-five guest rooms, a dining room, an ice house, and bath houses over the springs. Among the famous people who came to stay there were Herbert Hoover, Zane Grey, Will S. Hart, and Amelia Earhart (Hessig 1965). They came in from the railroad station at Agar in the Shasta Valley at first by stages, but later in "a $7,000 locomobile with chain drive" (Hessig 1965:66).

The hotel burned in 1915. The business began to decline and Mrs. Edson sold the property. Both Jones (1971) and Hessig (1965) attribute the decline of the Hot Springs resort to the changes wrought by the automobile. People were no longer willing to endure the road in, or to stay for a whole week. Later the property is supposed to have belonged to Margaret Rutherford. Now the property belongs to PP&L, and is leased out to ranchers.

Around 1903 Abner Weed built a lodge at Grass Lake. This had 32 rooms (Lewis 1967b) (84 rooms by another account, Siskiyou Pioneer 1963:73). This resort attracted tourists in the early part of the century. Reportedly its decline began when Grass Lake was allowed to drain through a hold blasted in its bottom, and the hotel was dismantelled in the late 30's or early 40's (Lewis 1967b).

Besides large commercial lodges there are a series of campgrounds that are or were maintained by the Forest Service. Each year in addition hunters' camps are established in virtually every clearing in the mountains. These usually include rustic constructions such as makeshift tables nailed to trees, poles nailed high on trees for hanging and butchering deer, and of course extensive can and bottle dumps. Some camps which are used year after year have substantial features like iron stoves and homemade water systems located deep in the woods. Such camps are probably not significant now, but potentially will form a historic

resource calling for interpretation in the future analagous to the aboriginal ephemeral hunting camps established in the high meadows in the past.

V. Distribution of Known Cultural Resources

General Remarks

When all known sites of cultural resources are plotted on a map, it is difficult to detect clear patterns in their distribution. Some clusters occur because a survey was made when a specific project demanded it, while the neighboring section was not surveyed. Some cultural resources tend to occur in the same kinds of places. For instance, Indian and settler sites are often found together both in the lowlands and the highlands. Since the Indians were not agricultural nor did they have domestic animals (other than horses in postcontact times), this means that the food plants and animals that the Indians used were adapted to niches similar to those that the domestic plants and animals the Europeans depended on.

Information for the location of sites comes from several sources. One is sites identified from historical or ethnographic literature, or reported to the Klamath National Forest Archeologist by persons who encounter remains in the field by chance, or who remember features that have since been forgotten. These are recorded in the forest's inventories. By a similar process some sites have been recorded in the State Site Inventory, and assigned a site number. The second means of site discovery is from systematic surveys in areas about to be impacted by some project. An example of this is the surveys conducted when timber sales or land exchanges are proposed. These surveys report sites discovered, as well as describe the area that was surveyed, how intensively different parts were surveyed, and how likely it was that sites might have been missed that really exist. These are valuable because they give us information not only

about where particular kinds of sites are, but also about where sites are not. Similar information is received by the State Site Inventory from cultural resources surveys conducted in accord with the NEPA and the California equivalent, the CEPA.

The first process is valuable because it allows sites to be recorded as they are discovered. However, although haphazard, it is far from a random process. Sites are encountered where people happen to be working. An informant may list many sites in the region he has experience. A neighboring region which lacks such an informant might have no sites recorded in it at all. The information from archeological reconnaissances is also valuable because it not only locates sites, but covers the larger setting of the sites, and gives us negative as well as positive information. However, these reconnaissances are far from random. They are made where potential impacts are anticipated. Typically these are where timber sales are proposed. A whole complex of factors determines where timber sales are proposed, according to a number of considerations taken into account by the Forest Service in offering the land for sale. If we tried to identify conditions that determine the patterning of sites from this information alone we might conclude that sites occur where timber sales are proposed, hardly a conclusion that would be received favorably by anyone.

Because of these problems in the way we know about sites in the west half of the Goosenest, we cannot positively identify patterns in distribution. Enough sites have been recorded to suggest some patterns. If we analyze these possible patterns in the context of the culture history of the area, we can suggest which ones might be real. Other patterns suggested by the maps may need testing to establish if they reflect patterns in the behavior of the people who left the sites, or in our behavior as we discover sites. At present, with the inherent biased nature of the way that we identified site distribution, we can only suggest these patterns as hypotheses.

Indians

As one might expect, there is a difference in the distribution of sites on the eastern (Modoc) side of the Cascades, and the western (Shasta) side of the Cascades. At the same time there are some basic similarities in factors that determined the location of sites on both sides.

If we combine the information from Forest Service and state archeological reconnaissances with published material such as Heizer and Hester (1970), Ray (1963), and Spier (1930), there are some definite patterns that begin to emerge. Sites are distributed along both banks of the Klamath River at roughly 1/2 mile intervals. Favored spots include creek mouths. Other favored spots include caves and rock shelters in the steep canyon walls of the Klamath River Canyon. These sites are represented in the published articles, but typically are under-represented in the forest and state inventories. This is probably because this land is still in private hands.

Sites also tend to occur up the valleys of major tributary streams coming down from the Cascades to the Klamath. Some are found at intermediate altitudes. At least some of these are associated with oak covered slopes, where oak, madrone and manzanita could be gathered. Others are found at the headwaters of these creeks (e.g. Willow Creek, Deer Creek, Shovel Creek). Here scatters of material are found associated with poorly drained meadows with springs. These may represent seasonal usage of lily and carrot family plants that can be found in this area. The intermediate level sites may represent stations on a seasonal transhumance from sites along the river to high meadows. Typically these sites are identified from field survey, but are not recorded in the historic and ethnographic material. This is probably because the permanent winter sites in the lowlands were more likely to be remembered and recorded by Indian informants and their scribes, the ethnographers. We don't know if all the sites are

contemporaneous, and form part of a transhumant pattern or if they represent different usages by different cultures at different times. If we could understand the nature of the sites at each level, we could then more accurately interpret the apparent pattern on the maps.

On the southwest side of the project area the Shasta Valley borders the central Cascade Mountain range. The bottom of the Shasta River Valley at this point is wide and almost flat, and drainage is poorly developed. Silver (1978) reports favored spots for sites are at the very edge of the valley floor, often where streams exit from the mountain slopes onto the flat valley floor. The few sites recorded appear to follow this pattern. There is not enough information to tell if a similar series of sites follows stream valleys up from the Shasta Valley to the 6,000 foot level, as they do above the Klamath River. Two sites are at the headwaters of one such stream (Sis 13, 14).

To the east there is a similar pattern around the remnants of pleistocene lakes in Butte Valley and the Klamath Basin. Here historic sources describe settlements on the shores and islands of the marshy lakes (Ray 1968, Grayson 1973). This is confirmed by distribution of known sites recorded in state files and Forest records. Sites can be found all along the shores of the lakes as they were before extensive drainage schemes were put into effect. Historical sources tell us that resources being exploited by the Indians included fish (suckers, millet), migratory fowl, wocas (water lily seeds) and epos (carum sp.), a root found in the marshes.

Away from the lakes on the east side of the Cascades, predictably sites tend to cluster around water sources. A number of water holes are associated with lithic scatters from settlements.

The pattern of sites clustered around the lakes may be repeated around Grass Lake. One site is on the shoreline of the lake. High flat areas along streams also seem to have sites associated with them.

Settlers

There are a number of parallels between Indian settlement patterns and white settlement patterns. This is most striking in the east in Butte Valley, where early settler sites and Indian sites separately or together line the edge of the floor of the now drained valley. When the area was originally settled the lakes and marshes were still wet, and the marsh land was considered nearly worthless by white settlers. Only later drainage and irrigation projects made the lake bottom economically valuable A similar parallelism can be seen in the highlands. The high mountain meadows that seem to have been used by prehistoric inhabitants were also used by Europeans for pasturing herds. Often structures were built to house the caretakers of the herds. Examples include the White sheep cabin (Hopkins 1978) and Martin's Dairy, which had a dairy powered by an undershot wheel. Both are found at roughly 6,000 feet above sea level. Ohter herding uses are attested by names such as Poison Spring, named for a spring reportedly poisoned by cattlemen to attack a group of sheep.

The Klamath Canyon does have a few ranches along it, but the intensity of white usage does not approach Indian use. The Indians were utilizing the fish and aquatic resources of the river, while the Europeans needed flat land for their fields and pastures. This is in short supply along the river.

In the Shasta Valley several white settlements are found at the foot of the mountains, like the Indian sites. Again, the valley bottom is poorly drained. In the Shasta Valley many fences, out buildings, and even cabins and farmhouses are more likely to be found out in the valley floor than Indian settlements.

A number of kinds of settler features have no parallel in Indian life. These include walls, fences, dams, and canals. These features can be detected in the field, and often are much longer lived than the associated buildings.

Fences range from barbed wire to well constructed stone walls utilizing natural outcroppings. A number of ditches associated with agriculture are in the Goosenest district. There exist little of compiled taxonomies of ditches or fences to draw on. Barbed wire can be dated. Wire fences will often be associated with trees which have grown over the wire, giving a hint of antiquity. Stone fences would be harder to date. It would be interesting to see if a stone fence were limited to one period, or whether they are widespread over time, and whether different techniques can be established. Fences can be dated by association with datable structures such as houses or barns.

It is also possible that a history of techniques of building ditches can be established. The implications of power machinery, for instance, may produce a different kind of ditch than hand dug or draft animal dug ditches. The modern widespread use of pumps and piping may have different effects on the landscape than canal irrigation or drainage.

Both fences and ditches are liable to be amenable to historic research and verification. Fences mark property lines, and a search of titles may allow dating of when the property was established. Ditches involve water rights, and water rights are recorded. A survey of water rights may lead to the identification of ditches in the field, and ditches in the field may be linked to specific water rights.

Transportation

The western half of the Goosenest district is a major barrier between two different regions east and west of the Cascades. In prehistoric and historic times these areas were occupied by different ethnic groups. We know little of the nature of prehistoric routes of travel, although I have suggested above that they may have gone up the major drainage of the tributary streams to the valleys on both sides. The Klamath River was not an artery of transportation, as its

formidable rapids would have smashed the canoes and reed rafts into smithereens. However, with villages densely settled along the river, there must have been trails along both sides, as well as regular crossing points. Historic accounts suggest that canoes were left at such spots.

Historically there were several routes that traversed the western half of the Cascades (see Map 2) in the Goosenest. The southern boundary (Highway 97) is one such route. The Topsy Grade follows the south side of the Klamath River. The Ball Mountain Road cut through the Cascades between the two. These were traversed by Europeans beginning with Peter Skene Ogden through ranchers driving their herds west to the railroads in the last half of the 19th century, to the railroad in the beginning of this century. Associated with these routes should be stage stations, camp places, and even famous hold up places. It should be possible to locate Peter Skene Ogden's camps, and perhaps camps will be identified either historically or in the field from the cattle drives. The field records list no such features, but they would be important if identified.

The most striking feature in the Goosenest are the railroad grades. These played an integral part in both transportation and logging. The coming of the railroad made logging practical in the region. Logging routes, like the Pokegama Railroad and the Weed Railroad were often links in transportation. When the railroad grades were abandoned the grades were often used as the basis for roads of today.

All of the railroad grades in the Goosenest district have been mapped from aerial photos, and are recorded in the Cultural Resources Atlas of the Klamath National Forest. The areas along railroad grades will be particularly sensitive. A number of features are likely to be found along them. These include line camps for maintaining the trains, as well as features which will be discussed below under logging. One such site, the Lava Camp, has been nominated to the

National Register of Historic Places (Sellman 1979).

Logging

Sites associated with logging have a complementary distribution to the sites involved with settlers. Logging tends to cluster on the forested spine of the western half of the Goosenest. Railroad logging was extremely important in the area, and logging features tend to be associated with railroad grades. A number of features have been identified that are associated with railroad logging. There are some early horse logging sites where logs were dragged to the railroad by draft animals. These included corrals for holding animals when they were not in use. Logging, including railroad logging, had begun even before the turn of the century, and was important in the first decade of this century.

Another feature frequently associated with railroad logging is a radial pattern of skid roads out from stations along the railroad grade. Areas would be logged around such stations and a train mounted donkey engine would haul the logs to the railroad.

Camps where the loggers stayed were located along the railroad grades. These included buildings for different functions, such as sleeping, eating, and administration. These camps are important because they can give us information about the nature of the social structure of the loggers. Were the loggers single men eating communally, for instance, or were individual families occupying separate quarters? Such camps would be located along railroad grades.

Mills are located in many different locations. Many older mills are located high in the mountains. When transportation was difficult, the mill was taken as close as possible to the trees, and the finished milled lumber was taken out. Later, as finished lumber became more and more available, the rough cut lumber became less and less competitive and mills became larger, more centralized, and more heavily capitalized. This process is reflected in the ages of mills located

in the district.

In the sample some mills are located high in the mountains, others are located at the foot of the mountains. Areas along railroad grades would be sensitive as mills both got their lumber and exported it on the railroad.

One unique feature in the district was the Pokegama log flume. This flume dropped logs from Dead Indian Plateau down almost a 1,000 foot vertical drop to the Klamath River. The logs were then floated down to the Klamathon Mill. The mill itself was a huge complex, including large log crib dams where the logs were ponded. There were camps associated with the flume. Later, a railroad was built to Pokegama connecting the mill to the area. This railroad, as mentioned above, was also a link connecting Klamath Falls by a stage line with the larger world.

One common logging feature is dumps from abandoned camps. These dumps often survive when buildings have disappeared. They often occur along railroad grades. The contents of the dumps can be used to date the camps and the associated railroad grades.

Forest Service

Forest Service sites are underreported in the records. It seems that Forest Service personnel are so used to Forest Service features that they don't notice them. The record lists only one burned down ranger station and one destroyed lookout, while the maps show lookouts, guard stations, and campgrounds that are certainly worth recording. The changing patterns of Forest Service administration as conditions of policy and access have changed over time has resulted in changing patterns of Forest Service Construction. Such buildings as the Lodgepole Guard Station deserve to be recorded, and some of the older Forest Service stations had architectural as well as historical importance. These resources can be mapped from old Forest Service maps and archives, and

field checked for their present condition.

CCC jobs are also somewhat underreported in this area. CCC camps and work areas have been recognized as potentially nominable to the National Register, and it seems probable that more CCC construction is in the western half of the Goosenest than has been reported.

Recreation

The Cascades, while a barrier to many white occupations, appeals to recreationists, whether backpackers or hunters and fishermen. A number of features represent this use. These range from large well constructed lodges from the beginning of the century to modern hunter's camps. In between are formal private and government camps. These include dumps, privies, administration buildings, fireplaces, paths, and other features.

At the mouth of Shovel Creek the remains of the Klamath Hot Springs resort are recorded. This resort existed from the 1880's to the 1920's. The remains of the tubs for the hot baths and the mud baths can still be seen.

Abner Weed is reported to have established a lodge at Grass Lake in 1903. This catered to sportsmen. It is probable that other such lodges also existed.

Mount Shasta lies just south of the project area. The mountains have long attracted climbers interested in the wilderness experience first popularized by John Muir and Joaquin Miller. A cairn containing a bottle and a note recording the dates of climbs was built in 1854 by John Rohrer on top of Goosenest Mountain (Wells 1881). It is not known if it is still there. Lava tube caves also occur in the region. Pluto's Cave was visited by John Muir (Muir 1975). It is still an attraction today.

Deer hunter's camps and small hunting cabins are also found in the woods. These sites often represent the last occupation of sites that have been used for many different purposes. Each Fall the woods fill with hunters after deer and

elk. Every meadow and spring has at least one tent or trailer next to it. The trees have makeshift tables or butchering racks nailed to them. The characteristic dumps of these camps, heavy on beer and whiskey bottles, give clues to the social activity that is associated with, indeed, some suggest, is the primary reason for hunting. Often these camps have not only fire rings but permanent stoves brought in and left year in and year out. Fishermen's camps may occur along the Klamath, although the inaccessibility of the Klamath River Canyon may discourage this.

VI. Conclusions and Recommendations

Of the seven major classes of cultural activities identified in the culture history, six are represented by known sites in the Goosenest district. Only one (Fur Trappers and Early Explorers) is not represented by a known site. This was the shortest and most emphemeral of the topics summarized. The nature of the distribution of sites for each of the other topics has been discussed in Section V. It remains to recommend what must be done for the Forest to be able to manage resources so as to avoid impacting them more than is necessary, and so as to preserve important cultural resources from each of the seven topics.

Significance and our current state of knowledge are related. Significance as defined by part 800 is contextual. Some parts of context are relatively unchanging. However, many other kinds of context change. For example, in prehistoric sites the definition of significance often falls under "being capable of producing information of significant scientific value." When we know nothing about a region, any prehistoric site is potentially capable of yielding significant information. Later in time, as we know more, we may be able to dismiss some kinds of sites as representative of a well known kind

of activity or time.

Again, historic sites in the Goosenest district are likely to qualify as being part of an important process that was historically significant in the region. There may be hundreds of sites pertaining, to pick an extreme example, to the 1960's and 70's hunter's camps, when people could use huge gas guzzling trucks to haul monstrous trailers laden with thousands of dollars of toys into the woods for hunting season. These sites are not significant today. However, fifty years from now this lifestyle may be as incomprehensible as the life of "Pres" Dorris is to us today. This does not mean that the Forest Service should go around spraying plastic over hunter's camps as soon as, or preferrably, before the hunters leave. It does mean that it might behoove the Forest Service to record the activities going on within it today. If we have a good record (perhaps in the form of photographs and interviews) of what is going on around us, fifty years from now we may have a basis to be able to say we know what was going on then, and don't need to go out of our way to preserve all sites that have survived from that period.

A similar problem faces us with significant historical processes of which any single site is not that prepossessing. A good example of this is the railroad grades of the first half of this century. Features are widespread on the Forest, but individual sites are unimpressive. Yet the impact of railroad logging on the district, the Forest, and the region, cannot be denied.

The solution to this problem is an evaluation of each of these processes, and the significant sites that remain that relate to the process. If we then evaluate the known sites we can select a representative of the range of this process and preserve them and mitigate or ignore the other sites. Of course, we must evaluate each new site found, but with such a context to measure them against, we can decide whether the new site tells us anything significantly

new, or whether it, too, is expendable.

The alternative is to simply drift through time, and awake to a time when we discover that a particular (mediocre or poor) site is the last or one of few remaining sites pertaining to a particular important activity or process, and expensively halt some major project. In the first case we will be able to save good representative sites, and we will know where sites can be expected. In the second case, we will end up saving poor sites with expensive consequences. There is little question that the first alternative not only is what is intended by Exeeutive Order 11593, among other directives, but is also potentially by far the cheaper alternattve.

The earliest two (Indians, Fur Trappers and Early Explorers) of the seven topics demand a different treatment from the other five topics (Settlers, Transportation, Logging, Forest Service, Recreation). The sites from these two topics are not highly visible. In our present state of knowledge any site from either Indians or fur trappers and early explorers would be significant. The sites from the other five topics, both because of recency and because of the nature of use, are much more visible. In each topic sites range from highly significant to unimportant, and an evaluation must be conducted for each site.

At this point we must consider any site from the prehistoric or historic Indian occupations as significant. Any sites pertaining to the historic fur trappers or early exploring expeditions, such as Peter Skene Ogden or John Charles Fremont would be highly significant. These camps would be as ephemeral and difficult to detect as the Indian sites. In the case of the Indian sites it is likely that the Forest will impact Indian sites and will have to pay for expensive mitigation sometimes. In the case of the early explorer sites, both because the period and the number of sites is so short, and because the main routes and camp spots are not in National Forest land, it is less likely that the Forest will directly confront one of these sites. In both cases the Forest can

collect more information to allow them to avoid impacting these sites. In the case of Indian sites it is possible that in the future, when we know more about these kinds of sites, we may be able to eliminate some sites as simply another example of a well known process. However, the kind of research that will lead to this state of affairs is very expensive, and it would not be economical for the Forest to try to hasten this day by paying for the research.

A number of prehistoric and historic Indian sites are known in the project area. A number of sites remain to be discovered. Comparing known village sites recorded in Heizer and Hester (1970) with sites recorded by either the State of California or the National Forest it is clear that many more sites have yet to be recorded.

From the sites recorded some patterns appear to exist. However, because of the nature of how data was assembled, it is impossible to be certain that these patterns reflect the behavior of Indians instead of the behavior of the people looking for sites. Specific research needs to be done to test specific ideas about these patterns. These might include the idea that sites tend to follow major drainages up to high altitude sites. Other hypotheses might include attempts to show differences between settlement to the east and west of the Cascade divide. The advantage of such research is that with scientifically based evidence for patterns in the distribution of sites, it would be possible to plan with some certainty of where sites are likely to occur, and thus avoid expensive mitigation. It should also be possible to justify more cursory surveys in non-sensitive areas, if there was solid evidence to show that these areas were non-sensitive.

Each of the five remaining topics presents a broadly similar problem. Each clearly represents a process that is "associated with events that have made a significant contribution to the broad patterns of our history" and each

contains elements that "embody the distinctive characteristics of a type, period, or methods of construction . . . or . . . represent a significant and distinguishable entity whose components may lack individual distinction" and that "may be likely to yield information important in . . . history" (35 CRF 800:3369). Yet when we look at a particular section of railroad grade or turn-of-the-century bottle dump, it is hard to say that that particular feature is worthy of nomination to the National Register.

The solution to this is a topic by topic inventory, including both historical research and field checking to inventory and locate at least a representative collection of features related to each topic. Sites located in the inventory should then be subjected to a triage. A sample of best preserved and most representative sites should be selected for each topic. These should then be protected, probably including nomination to the National Register. A second category of sites that are relatively well preserved (in some cases perhaps equal to those put in the first category) should have mitigation procedures followed to salvage information from them if they are to be impacted, but that could be destroyed. The third category would be sites that because of disturbance or poor preservation do not merit mitigation.

This will accomplish several goals for the Forest. First, it is what is mandated for the Forest under the terms of managing cultural resources. This will allow intelligent decisions to be made about managing cultural resources, and preserving of representative samples of our past. It will allow the Forest to eliminate some sites from concern and to accurately estimate the costs of impacting others. Thirdly, it will provide a framework against which any new site can be evaluated.

A cultural resources overview is the first step in a three step process to inventory and manage cultural resources. This overview has identified

seven topics of important historical processes that have taken place in the western half of the Goosenest district. Our present knowledge of each topic has been discussed. The conclusion of the overview has been specific recommendations for the next step in the inventory process. These will allow the Forest to efficiently fulfil its mandate to manage and preserve significant cultural resources under its jurisdiction.

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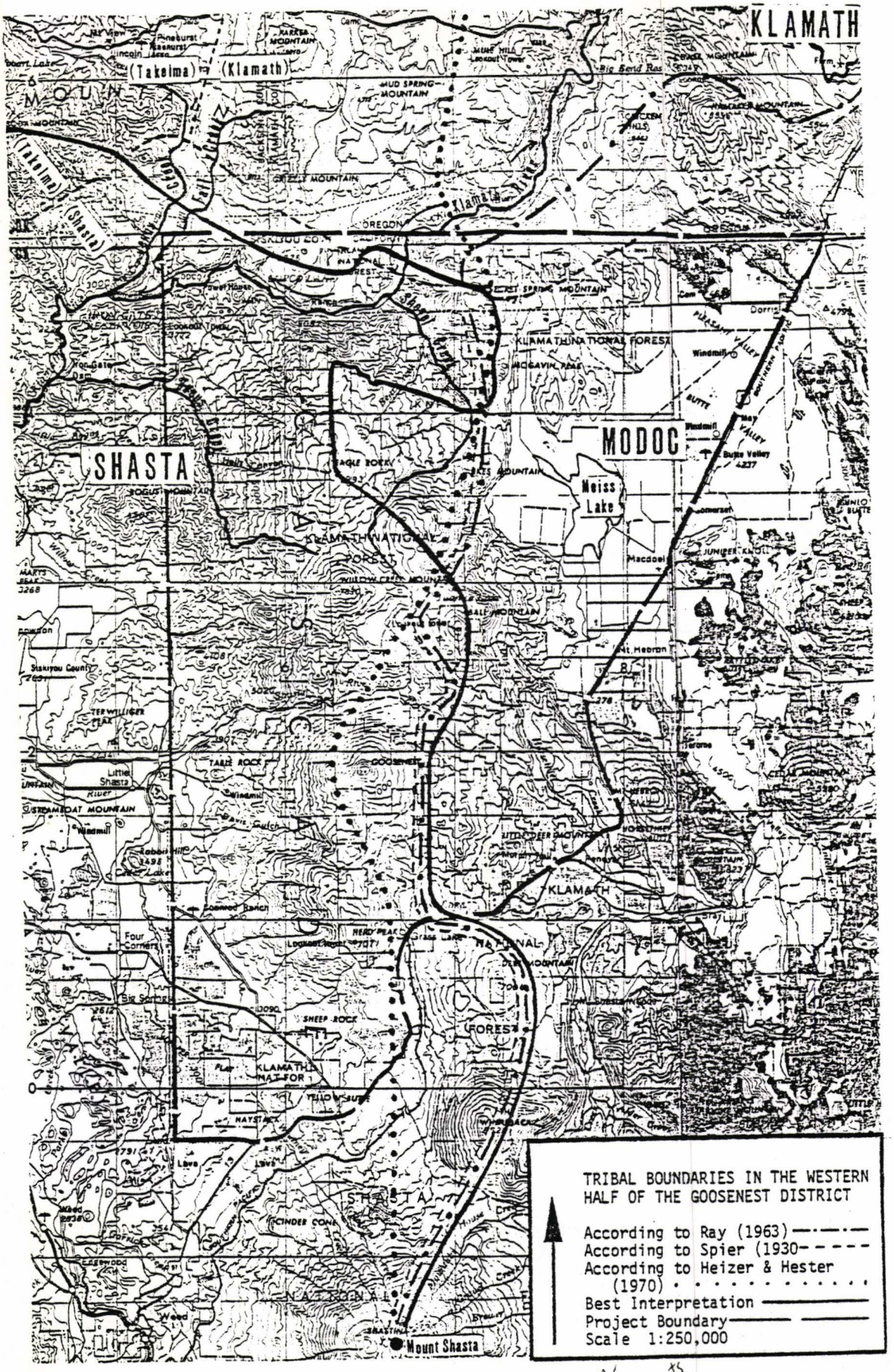
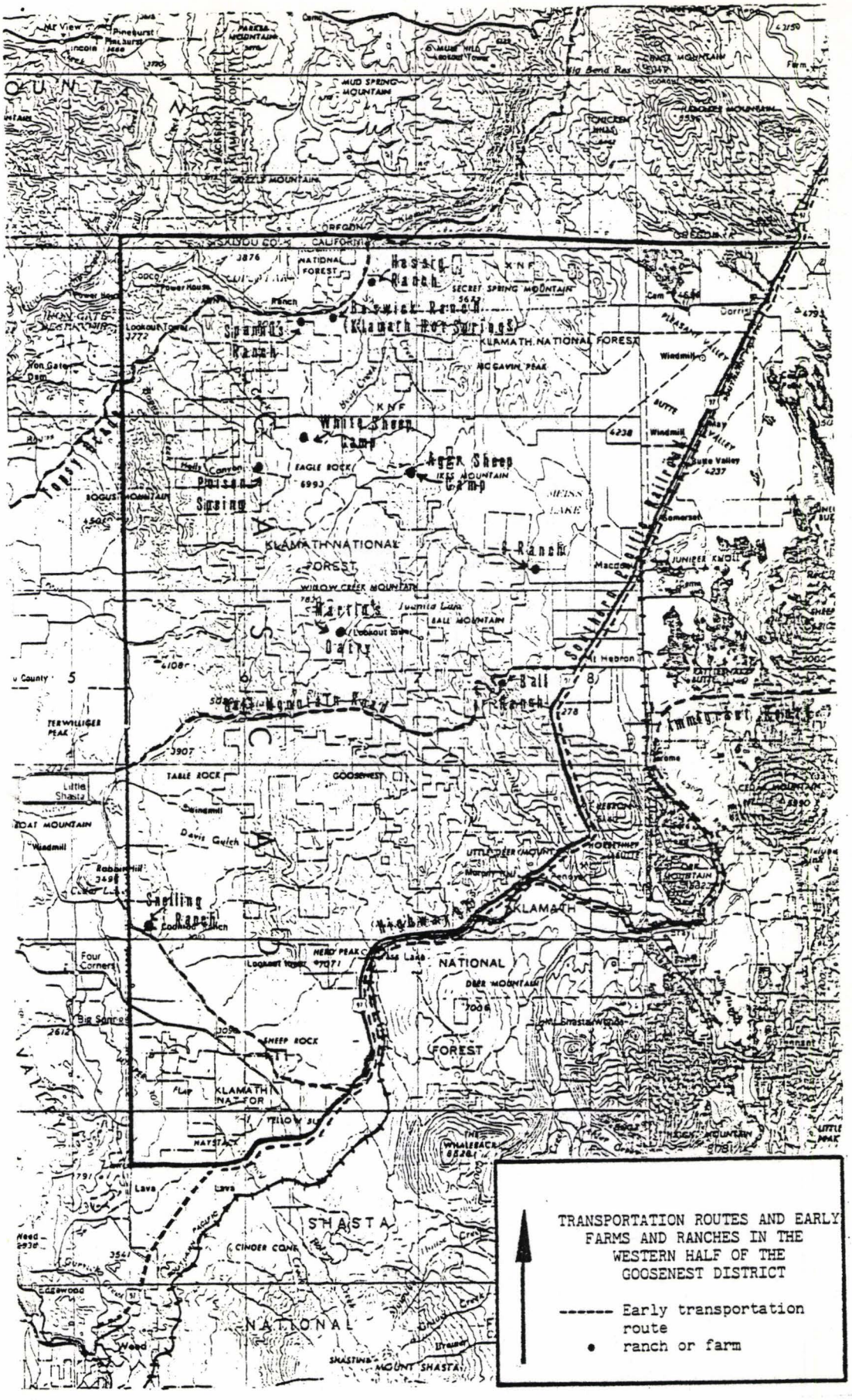


MAP 1

salmon fish
ethno accounts



MAP 2

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ROCKY MTN. FOREST & RANGE
EXPERIMENT STATION